

Title (en)
DRILLING TIP AND DRILLING TOOL

Title (de)
BOHRSPITZE UND BOHRWERKZEUG

Title (fr)
POINTE DE FORAGE ET OUTIL DE FORAGE

Publication
EP 4012155 A4 20230726 (EN)

Application
EP 20850786 A 20200117

Priority
• JP 2019145480 A 20190807
• JP 2020001422 W 20200117

Abstract (en)
[origin: EP4012155A1] Deterioration in boring efficiency is curbed and the costs of repolishing are reduced by curbing wear-width progression of a distal end portion of a tip main body of a drilling tip. A drilling tip that is attached to a distal end surface of a tool main body of a drilling tool which is rotated around an axis and in which a striking force is applied to a distal end side in a direction of the axis. The drilling tip includes a tip main body (1) in which a base end portion (2) having a columnar shape and a distal end portion (3) protruding from this base end portion (2) to the distal end side are integrally formed. The distal end portion (3) includes a curved convex surface-shaped portion (4) protruding to the distal end side of the tip main body (1), and a projection portion (5) extending in a diameter direction with respect to a center line C of the base end portion (2) viewed from the distal end side of the tip main body (1) and further protruding to the distal end side from a surface of the curved convex surface-shaped portion (4).

IPC 8 full level
E21B 10/56 (2006.01)

CPC (source: EP US)
E21B 10/43 (2013.01 - US); **E21B 10/56** (2013.01 - EP US)

Citation (search report)
• [XAI] US 2017362899 A1 20171221 - BELNAP LYNN [US], et al
• [X] US 2014182947 A1 20140703 - BHATIA LOKESH [US], et al
• See also references of WO 2021024512A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 4012155 A1 20220615; EP 4012155 A4 20230726; AU 2020324001 A1 20220303; CA 3149658 A1 20210211; JP 2021025350 A 20210222; JP 7299791 B2 20230628; US 11976518 B2 20240507; US 2022290502 A1 20220915; WO 2021024512 A1 20210211

DOCDB simple family (application)
EP 20850786 A 20200117; AU 2020324001 A 20200117; CA 3149658 A 20200117; JP 2019145480 A 20190807; JP 2020001422 W 20200117; US 202017631910 A 20200117